

**Amendments to the Specification**

In the Specification, at page 2 of 36, please replace paragraph 10, beginning at line 6 and ending at line 16 with the following rewritten paragraph:

Genetic information of all life forms is encoded by the four basic nucleotides, denoted by symbols A, G, C, and T. The make up of all life forms is determined by the sequence of these nucleotides. DNA is the molecule that encodes this sequence of nucleotides. The DNA molecule usually contains a large number of genes. Each gene provides biochemical instructions on how to construct a particular protein. The one-to-one nature of one gene creating one protein has been recently changed. In some cases multiple genes are required to create a single protein and commonly multiple proteins can be produced through alternative splicing and post-transcriptional modification of a single gene. An example of a genome is depicted in FIG. 1, wherein the genes 103, 105 are defined as segments of nucleotide sequence on the DNA genome 101. As depicted in FIG. 1, the letter "N" represents any of the four DNA nucleotides: "A," "C," "G," or "T."